Abstract

A method for the detection and treatment of disordered breathing during sleep employs an artificial neural network (ANN) in which data related to breathing gas flow are analyzed. A respiratory circuit is established by connecting the patient to a continuous positive airway pressure (CPAP) system with pressurized breathing gas supply, the gas flow in the circuit is periodically sampled, one or several cepstrum parameters distinctive of various breathing patterns are periodically calculated; the parameter values are periodically fed to an ANN trained to recognize breathing patterns characteristic of sleep disordered breathing and are analyzed in the network, the CPAP pressurized breathing gas supply is controlled in response to the ANN output. Also disclosed is a corresponding apparatus.